RE: OF 18 decision

Scheffler, Linda to: 'Carl Stivers', Sanders, Dawn, Andy Koulermos, TARNOW Karen E, Amanda Shellenberger, Kristine Koch 02/13/2007 09:38 AM

Cc: Dennis Hanzlick, "Scheffler, Linda", ljones, Shawn Hinz, Simon Page, "Applegate, Rick"

Carl,
Our preference would be for AMZ088, as it would include the subbasin with Texaco, McWhorter, and a small portion of the rail yard. The main connections from the rail yard are downstream of this manhole. However, I think we should recon all three potential OF 18 locations (AMZ088, AMZ087, and AMZ095). Not sure what access is like to AMZ088 and AMZ087, but I'll check with our field crew on availability.

-----Original Message-----
From: Carl Stivers [mailto:cstivers@anchorenv.com]
Sent: Tuesday, February 13, 2007 9:19 AM
To: Sanders, Dawn; Andy Koulermos; TARNOW Karen E; Amanda Shellenberger; Koch.Kristine@epamail.epa.gov
Cc: Dennis Hanzlick; Scheffler, Linda; ljones@integral-corp.com; Shawn Hinz; Simon Page; Applegate, Rick
Subject: RE: OF 18 decision

Dawn -

I think this is all do able. So, my conclusion is that we are proceeding with OF18. The one major issue is see that needs to be resolved is whether we will sample manhole AMZ095 - 14.5 (NW Yeon) as we suggested or something further downstream. Everyone please read the specific suggestion under "representativeness" below and respond with any suggestions on a specific manhole to sample.

Regarding your specific items, here are some thoughts:

Objective -- Any variations in deployment period will have to be considered in the data analysis. If the variations are large enough, it is possible that we might conclude the data are not very useful. I think this should be one of the things that we should be starting to discuss in our data analysis discussions. (This same

issue may come up
for other reasons, like a sediment trap gets
destroyed or lost, a
sediment trap cannot be placed well relative to water
levels in the
pipe, etc.)

Representativeness -- I am OK with picking an another
manhole further
downstream. However, my take is that we are getting
most (more than
half) of the industial area with AMZ095 - 14.5 (NW
Yeon). If we do move
downstream I'd suggest going no further than AMZ088 -
13.4' (RR yard),
since we lose another foot by that time, which really
seems to be
pushing it given the river statistics in Table 4-1 of
the FSP.

Data Integrity -- We will start to work on a
procedure for this.

River Stages -- We can see what sort of predictions
from Corps
operations we can get.

Non-stormwater discharges -- This is similar to
issues we are dealing
with at several sites and will be handled in the same
fashion.

Subbasin delineation -- I think we should pick the
location based on
elevation and the general intent to sample as much of
the industrial
land use without creating too frequent a risk of
river inundation. The
maps you gave us are quite clear on where the major
branches are and
that seems clear enough to pick a specific manhole
per the discussion
under "representativeness" above. I suggest that
further details of
the basin delineation can be worked out in the future
for the location
picked on that general basis.

Carl

Carl Stivers
Anchor Environmental, L.L.C.
1423 3rd Avenue, Suite 300
Seattle, WA 98101-2226
Phone: 206-287-9130
Fax: 206-287-9131

cstivers@anchorenv.com

information that is
intended for the use of the individual or entity
named above. If you
are not the intended recipient, please be aware that
any disclosure,
copying distribution or use of the contents of this
information is
prohibited. If you have received this electronic
transmission in error,
please notify us by telephone at (206) 287-9130, or
by electronic mail,
cstivers@anchorenv.com.

-----Original Message-----
From: Sanders, Dawn [
mailto:DAWNS@BES.CI.PORTLAND.OR.US]
Sent: Monday, February 12, 2007 5:03 PM
To: Carl Stivers; Andy Koulermos; TARNOW Karen E;
Amanda Shellenberger;
Koch.Kristine@epamail.epa.gov
Cc: Dennis Hanzlick; Scheffler, Linda;
ljones@integral-corp.com; Shawn
Hinz; Simon Page; Applegate, Rick
Subject: RE: OF 18 decision

If we go the route of sampling OF 18, there are
several issues we should
discuss or consider, such as how will we determine
whether this sample
is
representative and not significantly impacted by
river inundation.
Below
is a list from me and Linda for your consideration.

Objective -- if data collected from this basin is
intended as a
cross-check
for land use loading rates derived from other
sampling locations, will
it
matter that selected storms and sediment trap
deployment periods will
likely
vary from the other locations, due to inundation
issues?

Representativeness -- since procedures will have to
be employed to
remove
the sediment trap during high river level periods,
would it be more
worthwhile to have the sampling location downstream
of as many
significant
industrial sources as possible (i.e. the Texaco,
Guilds Lake Railyard
and
McCloskey Varnish sites)?

Data Integrity -- a clear set of field procedures will be needed to identify periods for sediment trap bottle removal and stormwater sampling, to maximize the potential for collecting useable data. Procedures should consider: a higher level of flow meter accuracy verification/calibration, as it will be the only measure of whether collected samples are representative of storm discharge conditions; a process for comparing real time river elevation data with measured depth and velocity at the sample location to evaluate the relationship between the two; and more frequent field inspection during high river stages to verify sample bottle integrity.

River Stages -- river elevation changes result from rain events, tidal influences, and seasonal reservoir releases. Communication with the Corps may help with predicting periods of high river elevation due to dam releases.

Non-stormwater discharges -- DEQ has issued Van Waters and Rogers a permit for significant volumes of non-stormwater discharge. The nature and frequency of these discharges should be evaluated during the consideration of this sampling location and equipment programming. Base flows from Forest Park streams should also be considered.

Subbasin delineation -- final sampling location selection should include a more thorough discussion of the Basin 18 subbasins, to understand which industrial sites and how much of Forest Park would be represented at each potential location (i.e., the farther one goes up the system, the greater percent Forest Park flows are to the overall flow).

-----Original Message-----
From: Carl Stivers [mailto:cstivers@anchorenv.com]
Sent: Monday, February 12, 2007 3:09 PM

To: Andy Koulermos; TARNOW Karen E; Amanda Shellenberger;
Koch.Kristine@epamail.epa.gov
Cc: dawns@bes.ci.portland.or.us; Dennis Hanzlick;
LindaSC@BES.CI.PORTLAND.OR.US;
ljones@integral-corp.com; Shawn Hinz;
Simon Page
Subject: RE: OF 18 decision

All -

Sounds like we have an opinion forming. Anyone from the City have a
different opinion? Laura Jones?

Carl

Carl Stivers
Anchor Environmental, L.L.C.
1423 3rd Avenue, Suite 300
Seattle, WA 98101-2226
Phone: 206-287-9130
Fax: 206-287-9131

cstivers@anchorenv.com

-----Original Message-----
From: Andy Koulermos [mailto:akoulermos@newfields.com
]
Sent: Monday, February 12, 2007 2:41 PM
To: 'TARNOW Karen E'; Carl Stivers; Amanda Shellenberger;
Koch.Kristine@epamail.epa.gov
Cc: dawns@bes.ci.portland.or.us; Dennis Hanzlick;
LindaSC@BES.CI.PORTLAND.OR.US;
ljones@integral-corp.com; Shawn Hinz;
Simon Page
Subject: RE: OF 18 decision

I agree.

-----Original Message-----
From: TARNOW Karen E [
mailto:TARNOW.Karen@deq.state.or.us]

Sent: Monday, February 12, 2007 2:29 PM
To: Carl Stivers; Amanda Shellenberger;
Koch.Kristine@epamail.epa.gov
Cc: Andy Koulermos; dawns@bes.ci.portland.or.us;
Dennis Hanzlick;
LindaSC@BES.CI.PORTLAND.OR.US;
ljones@integral-corp.com; Shawn Hinz;
Simon
Page
Subject: RE: OF 18 decision

I'm sitting here with Kristine and we both feel it is
better to sample
this location than not. If we have to throw the data
out in the end, so
be it. But might as well give it a try.

Karen

-----Original Message-----
From: Carl Stivers [mailto:cstivers@anchorenv.com]
Sent: Monday, February 12, 2007 12:45 PM
To: Amanda Shellenberger;
Koch.Kristine@epamail.epa.gov
Cc: Andy Koulermos; dawns@bes.ci.portland.or.us;
Dennis Hanzlick;
LindaSC@BES.CI.PORTLAND.OR.US;
ljones@integral-corp.com; Shawn Hinz;
Simon Page; TARNOW Karen E
Subject: OF 18 decision

Stormwater Tech Team -

In addition, to the OSM location issue, I wanted to
get back to everyone
about the status of OF18 location. We did the recon.
and obtained
information from the City on the invert elevations of
various OF18
manholes. The result is that like some of the other
City basins, we
have to go upstream within the system a certain
distance before we get
to elevations that start to be feasible from a
potential river backup
perspective.

The attached map shows the locations of potential
manholes for sampling
and the list below gives their approximate COP datum
elevations.

AMZ094 - 12.5' (at Gunderson parking lot)

AMZ093 - 12.9' (RR yard)

AMZ092 - 13.1' (RR yard)

AMZ089 - 13.3' (RR yard)

AMZ088 - 13.4' (RR yard)

AMZ087 - 13.4'

AMZ095 - 14.5 (NW Yeon)

By the time we get up to AMZ095 we still have a drainage area that includes a considerable amount of industrial/light industrial and open space usage. Once we go above there we are cutting out large chunks of the industrial drainage, which would seem to run counter to the objective for this station.

If you compare the elevation at AMZ095 (with correction) to the river gauge statistics in Table 4-1 of the FSP, you can see that there is a relatively high chance that this location could be inundated with river water at some time during the three month deployment period.
Consequently, I would suggest the two following potential decisions:

1. Don't sample OF18 due to the risk of innundation and don't look for a replacement location. The reason for not looking for a replacement is two fold: (1) OF18 is already a replacement for OF17 and during our Jan. 31 meeting discussions we were running out of candidate locations for large multiple use basins to sample. Thus, I am not sure where else we would propose at this point. (2) We are far enough into the recon and mobilization stage that we are really running out of time to find, understand, and pick any new locations. We need to be installing equipment now, not looking for sites.

2. Sample OF18 at AMZ095 and try to manage the risk of inundation effects by closely monitoring the river levels during trap and water sampling activities limit the potential for impacts. Thus, we would not conduct water sampling at this site during storm conditions that were coincident with higher river levels. Similarly, we would pull sediment trap bottles if it looked like the river was coming up to unacceptable levels. Even with these management approaches, there is still some risk

that we might miss a quick change in the river elevations and have an
"impacted" sample results.

Let me know if you have a preference for one of these two approaches or
any other suggested path forward. We need to make a decision on this
and OSM this week, so that we can be ready to install equipment next
week.

Thanks.

Carl

Carl Stivers
Anchor Environmental, L.L.C.
1423 3rd Avenue, Suite 300
Seattle, WA 98101-2226
Phone: 206-287-9130
Fax: 206-287-9131

cstivers@anchorenv.com

-----Original Message-----
From: Amanda Shellenberger
Sent: Monday, February 12, 2007 8:49 AM
To: Carl Stivers; 'Koch.Kristine@epamail.epa.gov'
Cc: 'Andy Koulermos'; 'dawns@bes.ci.portland.or.us'; Dennis Hanzlick;
'LindaSC@BES.CI.PORTLAND.OR.US';
'ljones@integral-corp.com'; Shawn Hinz;
Simon Page; 'TARNOW Karen E';
'blischke.eric@epa.gov';
'humphrey.chip@epamail.epa.gov'
Subject: RE: Portland Harbor RI/FS Stormwater FSP for EPA/LWG Approval

Team--

Here is my understanding of the current status of the Oregon Steel Mills
Basins, per Merv Coover from Retec:

Outfall 001 receives a significant portion of total flow (approx. 20% from an area equipped with a Vortech and Stormfilter in a series configuration (Basin D). This equipment was installed early in 2006. Also, this outfall discharges an appreciable amount of groundwater year round due to infiltration into damaged sections of pipe. OSM is looking into the feasibility of repairing the pipe and eliminating the groundwater infiltration. This work would occur summer 2007 at the earliest. I expect that one would need to consider the existing groundwater infiltration and factor it into any sampling and data interpretation scheme.

Outfall 002 drains to the City-owned storm sewer in Ramsey Blvd. south of the plant. This water ultimately discharges to the river at Outfall 053A. OSM's recent plant expansion work in the basins (D, G and I) draining to this outfall resulted in significant storm water source control consisting of infrastructure and BMP upgrades.

There is a Vortech hydrodynamic separator on the main trunk line leading to Outfall 003. This device does little more than remove grit and floatable debris. While this is technically "treatment", it has no effect on dissolved constituents. Further, the solids removal capability of the device is limited to large grain sizes which are generally not expected to carry the majority of sorbed organic constituents anyway. OSM has been working with DEQ to implement a phased source control program which, in part, involves routing storm water runoff from Basins A and E through a gravity settling basin prior to discharge at Outfall 003. Plans call for having the settling basin on-line this winter.

Amanda Shellenberger, P.E.
Anchor Environmental, L.L.C
1423 3rd Avenue, Suite 300
Seattle, WA 98101
Phone: (206)287-9130
Fax: (206)287-9131

information that is
intended for the use of the individual or entity
named above. If you
are not the intended recipient, please be aware that
any disclosure,
copying distribution or use of the contents of this
information is
prohibited. If you have received this electronic
transmission in error,
please notify us by telephone at (206) 287-9130, or
by electronic mail,
amandas@anchorenv.com.

-----Original Message-----
From: Carl Stivers
Sent: Monday, February 12, 2007 8:16 AM
To: Koch.Kristine@epamail.epa.gov
Cc: Andy Koulermos; Amanda Shellenberger;
dawns@bes.ci.portland.or.us;
Dennis Hanzlick; LindaSC@BES.CI.PORTLAND.OR.US;
ljones@integral-corp.com; Shawn Hinz; Simon Page;
TARNOW Karen E;
blischke.eric@epa.gov; humphrey.chip@epamail.epa.gov
Subject: RE: Portland Harbor RI/FS Stormwater FSP for
EPA/LWG Approval

Kristine -

I agree that you have identified the range of
options. I think option 3
is a substantial departure from what we would be
doing at other sites,
so I am not in favor of that one. The others I am
pretty non-biased
about and would seek input from the Technical Team on
preferences.
However, before you vote, Amanda Shellenberger is
developing some
information in response to Karen's questions on the
OSM outfalls. Take
a look at that first when it comes out and then let
me know what your
preferences are. Thanks.

Carl

Carl Stivers
Anchor Environmental, L.L.C.
1423 3rd Avenue, Suite 300
Seattle, WA 98101-2226
Phone: 206-287-9130
Fax: 206-287-9131

cstivers@anchorenv.com

This electronic message transmission contains
information that is
intended for the use of the individual or entity
named above. If you
are not the intended recipient, please be aware that

any disclosure,
copying distribution or use of the contents of this information is
prohibited. If you have received this electronic transmission in error,
please notify us by telephone at (206) 287-9130, or
by electronic mail,
cstivers@anchorenv.com.

-----Original Message-----
From: Koch.Kristine@epamail.epa.gov
[mailto:Koch.Kristine@epamail.epa.gov]
Sent: Friday, February 09, 2007 10:22 AM
To: Carl Stivers
Cc: Andy Koulermos; Amanda Shellenberger;
dawns@bes.ci.portland.or.us;
Dennis Hanzlick; LindaSC@BES.CI.PORTLAND.OR.US;
ljones@integral-corp.com; Shawn Hinz; Simon Page;
TARNOW Karen E;
blischke.eric@epa.gov; humphrey.chip@epamail.epa.gov
Subject: RE: Portland Harbor RI/FS Stormwater FSP for
EPA/LWG Approval

Carl - The purpose of this years data is to correlate discharges of
stormwater with fish tissue data. Since the fish tissue data is based
on current sources, any source control action would affect that data.
Therefore, I believe that monitoring Outfall 003 (WR-24) at OSM will not
fulfill this data objective because they are adding a treatment process
to that outfall which would eliminate sources that were occurring when
the fish tissue data was collected. The data from that outfall,
however, should be used for the recontamination analysis for the FS.
Performance monitoring by OSM should be able to provide LWG with the
data necessary for the FS as long as the data collected is as described
in the LWG Stormwater FSP. Consequently, I see four options with
getting data for the fish tissue objective from the OSM site: 1)
Monitor Outfall 001 (WR-22); 2) Monitor upstream of the new treatment
system (if feasible); 3) Take the highest soil sample in the drainage
basin and multiply it by their TSS and runoff rates; or 4) skip it all
together.

Kristine Koch
Remedial Project Manager
USEPA, Office of Environmental Cleanup
1200 Sixth Avenue, M/S ECL-115

Seattle, WA 98101
(206)553-6705
(206)553-0124 (fax)
1-800-424-4372 extension 6705 (M-F, 8-4 Pacific Time, only)

Carl Stivers <cstivers@anchorenv.com>

02/07/2007 10:02 AM

To: Andy Koulermos <akoulermos@newfields.com>, dawns@bes.ci.portland.or.us, TARNOW Karen E <TARNOW.Karen@deq.state.or.us>, ljones@integral-corp.com, LindaSC@BES.CI.PORTLAND.OR.US, Kristine Koch/R10/USEPA/US@EPA

cc: Amanda Shellenberger <ashellenberger@anchorenv.com>, Dennis Hanzlick <dhanzlick@anchorenv.com>, Shawn Hinz <shinz@anchorenv.com>, Simon Page <spage@anchorenv.com>

Subject: RE: Portland Harbor RI/FS Stormwater FSP for EPA/LWG Approval

Stormwater Technical Team -

Amanda Shellenberger discussed the OSM outfalls with

OSM folks. Given that both outfalls have some form of treatment and WR-24 appears to have less treatment, we propose that WR-24 (the one originally designated by the management team) continue to be the one that is sampled at OSM. This is the location that is shown in the FSP that was just sent out. We are continuing with other new site recons. this week including confirmation of St. Johns bridge and Hwy 30 locations and working on finding a spot within OF-18 basin.

Also, FYI that GE is being some what reluctant and we hope to have go ahead from Schnitzer today to do the recon only. They have not yet agreed to give us access for the actual sampling.

Thanks.

Carl

Carl Stivers
Anchor Environmental, L.L.C.
1423 3rd Avenue, Suite 300
Seattle, WA 98101-2226
Phone: 206-287-9130
Fax: 206-287-9131

cstivers@anchorenv.com